United States Department of Justice
WASHINGTON, D.C. 20530

DEPUTY ASSISTANT ATTORNEY GENERAL
ANTITRUST DIVISION

August 25, 1983

Joseph Levine, Esq.
Office of General Counsel
U.S. Department of Commerce
Washington, D.C. 20230

Re: Commercialization of Civil Operational Earth-Observing Satellite Systems

Dear Mr. Levine:

Pursuant to the request of the Department of Commerce, the Antitrust Division has considered certain economic structural issues inherent in the commercialization of land remote sensing and weather satellites. Our examination of those issues is based solely on the facts you have presented to us and is limited to a preliminary identification of possible market failures that may create competition concerns. As I am sure you appreciate, we are not in a position to provide an analysis of more fundamental public policy questions as the desirability of commercialization, a systematic identification of all types of market failures potentially associated with commercialization, or the need for government subsidies to assure optimal output.

I should emphasize that the economics of markets for information are very complex and the technological possibilities in the satellite industry may make current market assumptions obsolete quickly. Accordingly, the ordinarily difficult task of foreseeing the existence of competitive problems is even more problematic in this industry. Great care should be exercised not to impose regulatory constraints in an attempt to correct a possible competitive problem until it is clear that a problem indeed is present and that the benefits of the regulation are greater than its costs. Moreover, many of the potential market failure problems we have identified can be remedied, as we explain in greater detail below, by application of existing antitrust law without the need for new forms of regulation.

The structural issue most readily suggested by commercialization is that of monopoly. The existence of only one firm selling a given product or service is not necessarily socially undesirable nor is it absolutely proscribed by existing antitrust law. Only where a firm acquires or maintains the power to raise prices above the competitive level in an unlawful manner is there a potential for antitrust liability. Monopolies occurring in other ways raise important issues of allocative efficiency, however, that must be addressed as a matter of public policy. Non-antitrust regulation may be desirable to deal with some such market failures, but in other cases may be inferior to a market solution.

One particular type of monopoly that is not per se unlawful under the antitrust laws is that of natural monopoly. A natural monopoly occurs in a market where the supply technology and costs are such that a single firm is the lowest cost supplier of market demand. Natural monopolies often occur in markets for information, since once the information is generated it can be sold to an additional consumer at little or no additional cost. It is unclear whether either land or weather satellite systems will be a natural monopoly over time. 1/ In each case, the evolution of the market structure will depend not only on current cost and demand conditions, but also on the particular scheme of commercialization and the rate and direction of technological innovation in this and related industries.

A second type of monopoly could also result from long-term government procurement commitments which severely limit entry into the industry. To the maximum extent possible the commercialization scheme and government procurement commitments should be constructed so that they do not create artifical barriers or subsidies that discourage potential competition. One way to do this is to limit government purchase contracts to a term that permits the vendor to recover that portion of its investment required to enable it to discharge its obligations under the contract. At the end of that period a new contract

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1/ It appears that there will be at least short-run competition by other firms in the land observing satellite market. For example, France intends to launch the first of four such satellites in 1984, and Japan, Canada, Germany, the European Space Agency, India and the Soviet Union, as well as United States domestic concerns, are all actively developing land satellite remote sensing programs. On the basis of this information, the likelihood that the land observing satellite market will evolve into a natural monopoly is somewhat diminished.

would be put out for bid, allowing the government to take advantage of quality-enhancing or cost-reducing innovations offered by competing vendors.

Value-added services derived from fundamental data products produced by either land or weather satellites may present issues separate from those relating to the ownership and operation of the satellites themselves. While we lack the expertise to suggest the dividing line between basic satellite services and value-added services or to predict the precise contours of the value-added market, we have no reason to believe based on the facts presented to us that significant structural antitrust problems will arise.

The extent to which competitive problems may arise as a result of a firm providing basic satellite services also providing value-added services depends on the competitive vigor in the market for basic satellite services. If there were effective competition in that market, vertical integration by a firm providing satellite services into the value-added services market would not, by itself, be likely to cause a market failure. Even in the case of an unregulated natural monopoly in the satellite market where vertical integration could create a market failure, such a problem, if it occurred, would be redressable by existing antitrust law and thus does not require an absolute regulatory bar to providing the value-added service as part of the commercialization scheme. 2/

2/ Since the satellites are essential to compete in the value-added services market, under existing antitrust law the satellite monopolist may be required to make its data available to its valued-added competitors on non-discriminatory terms. In particular, the satellite monopolist might be liable if it refused to deal or discriminated and it met the following four elements of the essential facilities doctrine: "(1) control of the essential facility by a monopolist; (2) a competitor's inability practically or reasonably to duplicate the essential facility; (3) the denial of the use of the facility to a competitor; and (4) the feasibility of providing the facility." MCI Communication Corp. v. AT&T Co., 1982-83 Trade Cas. (CCH) ¶ 65,137 at 71,391 (7th Cir. 1983). However, if the essential facility satellite-monopolist did not vertically integrate into the value-added services market, its refusal to deal on a non-discriminatory basis would not necessarily run afoul of the antitrust laws. See Official Airline Guides, Inc. v. FTC, 1980-2 Trade Cas. (CCH) ¶ 63,544 (2d Cir. 1980).

However, if the satellite monopoly were subject to rate regulation, then it might be appropriate for the commercialization scheme to bar the monopolist from providing value-added services. As a general matter, rate regulated monopolists should not be allowed to integrate into industries that are competitive. A regulated monopolist facing regulatory constraints has the incentive to enter related competitive markets and engage in cross-subsidization or other predatory practices and thereby obtain in those markets the monopoly profits denied to it by regulation in its primary market. 3/ A second-best alternative to complete prohibition would entail the use of a fully separate subsidiary to provide the value-added services. The effectiveness of this alternative as a remedy for the market failure problem may be substantially reduced if there are significant joint and common costs between basic and value-added services.

Based on the available information, we see no inherent structural problem requiring a pervasive regulatory scheme to accompany commercialization of land remote sensing and weather satellite systems. A commercialization scheme that depends on pervasive regulation may decrease the ability of the private sector to respond to changing market conditions to an extent that would offset any possible benefits of commercialization. It should be approached only with great caution. Since pervasive regulation appears unnecessary, it follows an antitrust exemption would also be inappropriate since it is a basic principle that such exemptions are to be utilized only where necessary to make a regulatory scheme work and even then should be as limited as possible.

In light of the limited information available to us, our analysis is necessarily restricted to the antitrust problems inherent in any such commercialization proposal. Given the complexity of the industry and the necessary limitations of our examination, a more systematic and thorough factual and economic investigation by economists with specialized expertise in the industries involved here is necessary to identify the full range of potential market failure associated with any particular

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3/ The problem here is made more complex by the possibility that the monopolist would copyright its data products and would need to protect its copyright against possible infringement. If adequate protection was not available, that monopolist might have no choice other than to perform the value-added services itself.

scheme of commercialization and to ascertain with confidence the need, or absence of need, for specialized forms of regulation.

I hope that our analysis is helpful.

Sincerely,

Wayne D. Collins

Wayne D. Collins
Deputy Assistant Attorney General
Antitrust Division

cc: Mr. Ray Kammer